Successful Recruitment of Computer Professionals

Newspaper Advertising Bureau, Inc.
1180 Avenue of the Americas
New York, New York 10036
212 921 5080

SUCCESSFUL RECRUITMENT OF COMPUTER PROFESSIONALS

March 1988

© Newspaper Advertising Bureau

CONTENTS

	Page
LIST OF TABLES	v
INTRODUCTION	vii
HIGHLIGHTS	xi
FINDINGS:	1
A. Identification of Recruitment Prospects	1
1. How Many Are Likely To Change Jobs?	1
a. Number Who Are Looking For A Job Now	1
b. Likelihood of Changing Jobs	2
2. How Often Do They Usually Change Jobs?	2
3. Definition of "Hot", "Lukewarm" and "Longshot" Prospects	5
4. How do the Prospect Groups Differ?	6
a. Satisfaction with Current Job Key Difference	6
b. Prospect Group Status Not Related to Experience or Specialty	7
B. Importance of Job Features in Assessing Employment Opportunities	9
1. General Observations	13
2. Detailed Examination of Features	14
a. Job Satisfaction	15
b. Salary and Benefits	17
c. Product/Company Variables	18
d. Other Factors in the Decision Process	19
C. How Prospects/Demographic Groups Differ in Job Selection Criteria	21
1. Relocation	21
2. Features Looked for in a Job	22
3. Demographic Differences	27
4. Summary and Implications	27
D. Relocation	30
1. Willingness to Relocate	30
2. Factors in Accepting a Relocation Job	31
a. Minimization of Financial Risk/Loss	36
b. Family Considerations and Relocation	38
c. Career Development and Relocation	40
d. Good/Improved Quality of Life	41
e. Location Variables	42
f. Spouse Employment	43
3. Conclusions About Relocation Job Criteria	43
4. How Prospects Differ in Relocation Criteria	44
5. Most Desirable/Least Desirable Destinations	45
E. Looking for a Job	49
1. Sources of Information	49
2. Most Important Source of Information	52
3. How Computer Professionals Use the Newspaper	54

CONTENTS (Continued)

	Page
4. What Makes Them Notice Particular Employment Ads?	62
a. Essential/Screening Information	62
b. Ad Features	64
c. Hot Prospects Want More Definite Information	65
5. Will They Respond to Your Ad?	66
a. Best Bet: Direct Contact With Hiring Department	66
b. Less Effective: Personnel Department Contacts	67
c. Least Effective: Mass Recruitment/Impersonal Techniques	69
d. Blind Ads: Avoid Whenever Possible	69
6. Summary	70
SUMMARY AND RECOMMENDATIONS	73
APPENDIX: Selected Tables	79

LIST OF TABLES

	Page
1. Two Measures of Job Mobility by Age of Respondent.....	4
2. Demographic Profile of Computer Professionals by Prospect Status.....	8
3. Features Most Often Looked For In A Job.....	10
4. Most Important Features In A Job.....	11
5. Reasons for Rejecting Potential Employment.....	12
6. Features Most Often Looked For In A Job (Prospect Groups)..	24
7. Most Important Features In A Job (Prospect Groups).....	25
8. Reasons For Rejecting Potential Employment (Prospect Groups).....	26
9. Features Important to Accepting a Job Offer Involving Relocation.....	33
10. Features Important to Accepting A Job Offer Involving Relocation (Prospect Groups).....	34-35
11. Most and Least Preferred States for Relocation.....	47-48
12. Usefulness of Employment Information Sources.....	51
13. Single Source of Job Information Used Most Often.....	53
14. Days of Week Newspaper Usually Read.....	55
15. Frequency of Newspaper Employment Ad Reading in Help Wanted Section.....	57
16. Newspaper Employment Listings Consulted in a Job Search....	59
17. Sections of the Newspaper Consulted for Employment Advertising.....	60
18. Sections of Newspaper Usually Read.....	61
19. Features Attracting Attention to Ad.....	63
20. Response to Employment Ads.....	68

LIST OF TABLES (Continued)

	Page
21. Satisfaction With Current Employer	79
22. Marital Status of Respondents	80
23. Occupation of Spouse	80
24. Number of Children in Household Under the Age of 18	80
25. Sex of Respondents	80
26. Age of Respondents	81
27. Number of Persons in Household	81
28. Annual Salary	82
29. Total Gross 1984 Household Income	83
30. Number of Years Employed in the Computer Science/Computer Engineering Field	84
31. Area of Specialization	84

INTRODUCTION

The computer industry has a problem. Regardless of which projections one looks at and/or believes, the demand for experienced, well educated computer professionals is going to increase dramatically over the next ten to fifteen years. According to the Labor Department's 1986-87 Occupational Outlook Handbook, the total number of positions both for computer programmers and for software analysts will increase 70% by the year 1996, and other computer-related occupations are expected to increase hiring at dramatically high rates as well (reported in MIS Week, April 28, 1986, p. 60).

Severe shortages are predicted in the more complex and challenging areas of the computer industry (including telecommunications, aerospace, military, software programming and applications programming) rather than in "routine" programming areas, where demand may actually decrease during the next ten years (MIS Week, August 18, 1986, p. 45).

Unfortunately, while demand is increasing, interest in computer-related professions among college students is dropping off. A recent article in the Wall Street Journal ("Jobs Go Unfilled as Fewer Students Show Interest in Computer Science", November 27, 1987, p. 13) noted that the number of college freshmen aspiring to computer programming and analyst careers decreased by half between 1982 and 1986 (from 8.8% of all freshmen to 3.5%). Some reasons for decreased interest reportedly include

diminished expectations about salaries in the industry, heightened awareness of the "unstable" conditions of the industry, (particularly after the 1984-85 "slump") and the decreased "glamour" of the field.

Further, major recruiters are already reporting difficulties not only in attracting but also in retaining qualified personnel. Edward Perlin Associate's 1986 Salary Survey of Data Processing Professional Positions reported annual DP staff turnover at 17% (down slightly from 18% in 1985).

In the face of increasing competition for a smaller pool of qualified workers, companies employing computer professionals must evaluate their current recruitment/hiring practices and take steps to enhance competitive position now. That evaluation means looking at measures to improve the overall image of the industry (PR), recruitment and retention procedures.

The Purpose of this Study

The purpose of the quantitative study reported here was to investigate what computer professionals want in a job, what incentives would motivate them to relocate, and how these professionals go about finding a job. The survey was designed to follow up qualitative research conducted in 1983 for the Newspaper Advertising Bureau by Blanka Epstein of Social Science Applications. That study identified a number of major issues, which were probed in detail in the current study.

Method of the Study

Computer professionals were randomly selected from a national list of computer scientists and engineers and screened by telephone for eligibility to participate in the study. Eligibility qualifications included: a minimum of two years college training, a minimum of two years working experience in the computer science field, a software-based specialty (self-classified as "programmer", "system analyst", "systems consultant", "software applications specialist", "systems programmer", etc.) and a minimum age of 21. Telephone screening was conducted between September 30 and October 21, 1985, by Response Analysis Corporation.

A total of 168 qualified computer professionals agreed to participate in the study (a self-administered mail questionnaire).* The questionnaires were mailed by Response Analysis shortly after telephone screening, with a remailing sent to those who did not respond within two weeks. A total of 137 usable questionnaires were received, for a response rate of 82%.

Leon Aron, Michael Macht and Stuart Tolley (all of NAB) and Blanka Eckstein of Social Science Applications were jointly responsible for study design and questionnaire construction. Ann Miksovic of Response Analysis Corporation supervised the field and tabulation work and contributed to the questionnaire design and pre-testing.

---

*A copy of the questionnaire used in this study can be obtained by writing to NAB's Research Department.

For support and help throughout the study, thanks are also due to Ira Gordon (NAB), and to an ANCAM (Association of Newspaper Classified Advertising Managers) task force consisting of Jim Roberts of the Chicago Tribune, Jack Ross of the Philadelphia Inquirer, and Gail Hyland of the Los Angeles Times.

Dorothy Shea of NAB's research department carried out the data analysis and wrote this report.

HIGHLIGHTS

This study makes two contributions to the body of knowledge concerned with recruitment and retention of experienced computer professionals. First, the findings confirm the hypothesis that a large percentage of computer professionals would consider leaving their current employer for a new job. This finding underscores the need to evaluate and/or improve retention as well as recruitment programs. Second, the study identifies factors which could be incorporated into such a recruitment/retention program, based on the specialized characteristics and needs of computer professionals.

1. While the majority (61%) say they are very satisfied with their current jobs, more than four in ten would consider taking a new position (11% actively looking for a new job, 32% thinking of looking). Further, most computer professionals are not averse to relocating for the right opportunity.

2. Those most likely to change jobs, Hot Prospects (22% of the sample), are significantly less likely to be satisfied with their current employer and more likely to consider relocating than are Lukewarm Prospects (37% of the sample), or Longshot Prospects (41%). The likelihood of being a Hot, Lukewarm or Longshot prospect cannot be adequately predicted by specialty, years of experience or demography.

3. When looking for a job, computer professionals appear to evaluate potential opportunities primarily on the basis of job satisfaction/career enhancement features, salary and related benefits, product/company integrity, and "other" factors.

   Of those feature categories, job satisfaction variables are clearly the most important. These include challenging work, opportunity for advancement, recognition by superiors and high caliber colleagues. Competitive salary is also extremely important.

4. When relocation is involved, however, the issues of financial risk and family often supercede job satisfaction/career enhancement. These issues create a "threshold" which must be crossed before computer professionals will seriously consider the job. Among these concerns are relocation assistance (such as paying moving expenses), same/better quality of housing, spouse's attitude toward relocation, good schools for children and a substantial salary increase.

5. In many cases, Hot Prospects and those more favorable toward relocation expressed lower levels of concern about the risks inherent in a relocation job.

6. Personal contacts are the most frequently used source of new job information, followed by newspaper employment ads and trade

journals. Hot Prospects were less likely to report using personal networks and more likely to report using newspaper ads than Lukewarms or Longshots.

7. Nearly half (45%) of the Hot Prospects reported reading newspaper classifieds at least once a week, compared to 22% of the Lukewarms and 24% of the Longhots.

8. Sunday placement of newspaper classified ads is essential, since nine in ten computer professionals read the ads on that day.

9. The majority checks the business section as well as the classifieds for job information. Some also read Careers or Science for employment opportunities.

10. Computer professionals want "nuts and bolts" information in employment ads: a thorough job description, qualifications and job location. Without these items, ad size and style will not be sufficient to attract attention.

11. Ads which ask the potential candidate to contact the hiring department directly are most likely to generate good responses. Fewer will respond to the personnel department, even when a specific contact is given.

FINDINGS

A. IDENTIFICATION OF RECRUITMENT PROSPECTS

1. How Many Are Likely To Change Jobs?

Computer professionals were asked a series of three questions designed to measure their interest in/expectations of changing jobs. These questions were structured so that immediate as well as "long term" (defined as a one year period) job change potential might be detected. The answers to the three questions were later combined to create "prospect" groups for use in the analysis.

a. Number Who Are Looking For A Job Now

Initially, computer professionals were asked whether or not they were actively seeking a new job at the time of the survey ("Are you actually looking for a job with another employer now?"). Of the 137 individuals responding, only 11% (15 respondents) reported an active search in process.

While the vast majority (89%, 122 respondents) indicated they were not actively seeking new employment, a third of those 122 "inactive" prospects (36%) conceded that they were thinking about looking for a new job. This

means that a fairly large proportion of the sample (43%) was open to the possibility of changing jobs.

b. Likelihood of Changing Jobs

Despite the fact that many would consider changing jobs, fewer computer professionals expected they would actually make a change. When asked: "Realistically, how likely is it that you will change employers in the next year or so?", less than one quarter said it was "very likely" (4%) or "somewhat likely" (18%) that they would do so. Another third (32%) said they "might or might not" change jobs within the year, and the balance (46%) considered it "not at all likely" that they would change jobs.

2. How Often Do They Usually Change Jobs?

While there is a good deal of disagreement among recruitment professionals regarding how frequently computer professionals change jobs in general, the data from the current survey suggests that our respondents were not individuals who change jobs frequently. Apparently they do not take job changes lightly. We asked them two questions to clarify this issue.

First, we asked them how long they have been with their current employer. In general, the respondents reported long relationships with their current employers, even when differences in age (and experience)

were taken into account (see Table 1). Even among the youngest computer professionals (age 34 or younger), nearly six in ten indicated they have been with their company for at least five years. Those who are older (and more experienced) reported even longer stays; 86% of the 35-45 year old group and 87% of those 46 or older have been with their company at least five years. Note that the percentage reporting 10+ years of service to the current employer increases dramatically and significantly[1] with age.

Second, we asked them how many job changes they had made throughout their entire careers. Consistant with the data reported above, relatively few job changes were reported by the respondents in each age group (Table 1). Only about four in ten of those in both the 35-45 age group (39%) and the 46 and older group (43%) have made two or more changes in employer. As would be expected, the youngest group was less likely to have made even one job change.

In interpreting these findings it is important to note that some recruitment professionals feel turnover rates may be on the rise. Compared to 1985, when this survey was conducted, the current marketplace is viewed as less stable overall and more frequent job changes are required for salary and career enhancement.

---

[1]As used in this report, "significant difference" stands for a difference large enough to be statistically significant at the .95 level. That means the difference is not likely to be a result of sampling variation and very likely to be true in the population sampled. For this relationship, the Chi-Square value of 40.1 ($df=4$; $p<.001$) is significant.

Table 1

Two Measures of Job Mobility by Age of Respondent

	Age 34 or Younger	Ages 35 - 45	Age 46 or Older
Years with Current Employer*			
1 - 4	43%	14%	13%
5 - 9	51	42	6
10+	6	44	81
	100%	100%	100%
Total Job Changes**			
None	47%	31%	38%
One	35	30	19
Two or more	18	39	43
	100%	100%	100%
Base (N) =	(49)	(71)	(16)

* Question: For how long have you been with current employer?

**Question: During the time you have been working as a computer scientist/ engineer, how many times, if at all, have you left one company to take a job with another company?

3. Definition of "Hot", "Lukewarm" and "Longshot" Prospects

Computer professionals responding to the survey were split into three groups, based on their responses to the three job change questions. This was done to identify salient differences, if any, between individuals who are more and less likely to respond to recruitment advertising.

Those most likely to change jobs ("Hot" Prospects) were defined as computer professionals who were either actively looking for a new job or thinking about looking for a new job and who said it was "very" or "somewhat" likely that they actually would change jobs within the next year. This group included 29 individuals (22% of the survey sample).

Conversely, "Longshots" (those least likely to change jobs) were defined as computer professionals who said they were neither looking nor thinking of looking for a new job and who said it was "not at all likely" that they would in fact change jobs in the next year. Longshots accounted for 41% of all respondents to the survey.

"Lukewarm" prospects (those who might or might not change jobs), in contrast to the more extreme Hot Prospects and Longshots, were defined as those who gave mixed answers to the three job change questions. For example, an individual who said he/she was thinking about a job change but said it was "not at all likely" that he/she would actually change jobs was considered a "Lukewarm" prospect. Similarly, the person who said he/she

was not thinking about changing jobs but was "somewhat likely" to make a change was also classified as Lukewarm. This "mixed" group included 37% of all respondents to the survey.

4. How do the Prospect Groups Differ?

a. Satisfaction with Current Employer is a Key Difference

In order to assess levels of motivation for changing jobs, computer professionals were asked to rate their satisfaction with their current employer "on an overall basis". A scale of one-to-ten was utilized, where "10" meant the individual was extremely satisfied with his current employer and a "1" meant he was extremely dissatisfied.

Overall, it is fair to conclude that computer professionals as a group are fairly satisfied with their current jobs, as 61% rated them very highly (an 8, 9 or 10). Conversely, only 4% said they were very dissatisfied (a rating of 3) and no one said he was "extremely dissatisfied" (a rating of 1 or 2) with his current employer. (The balance--35%--fall in the middle.) (See Appendix Table 21)

It is not surprising, however, that significant differences were observed in terms of satisfaction levels of the three prospect groups. Hot Prospects were much less likely to rate their employer highly (24%) than Lukewarm prospects (57%), who were, in turn, much less likely to indicate high levels of satisfaction than Longshots (84%).

b. Prospect Group Status Not Related to Demography, Experience or Specialty

While we might expect younger, better educated, and perhaps single respondents to be more strongly represented in the Hot prospect group, that was not the case. No significant differences in demography[1] were observed, as Table 2 shows. Some variations in age seem to be marginally important but do not sharply differentiate the three prospect groups.

Further, neither the amount of professional experience nor the computer professional's specialty was correlated with interest in or likelihood of changing jobs.

These data suggest that an interest in changing jobs is the result of individual dissatisfaction with the current employer, aspects of the position or perhaps the computer professional's specialty rather than of demographic characteristics (employment stages or cycles). Possible sources of job dissatisfaction will be discussed in the next section.

---

[1]Large numerical differences ($^{+}/_{-}$ 25 percentage points) are needed to constitute statistically "significant" differences. Additional details on the personal and occupational background of the sample of computer professionals are provided in Appendix Tables 22-31.

Table 2

Demographic Profile of Computer Professionals by Prospect Status

	Total	Hot Prospects	Lukewarm Prospects	Longshots
Age				
24 or younger	2%	3%	-	4%
25-34	34	38	41%	25
35-45	52	45	49	59
46-50	7	7	6	7
51+	5	7	4	5
	100%	100%	100%	100%
Sex				
Male	85%	83%	84%	86%
Female	15	17	16	14
	100%	100%	100%	100%
Marital Status				
Married	72%	62%	73%	75%
Not Married (Single/Divorced/ Separated/Widowed)	28	38	27	25
	100%	100%	100%	100%
Education				
Two Years of College/ Associate Degree	5%	-	4%	9%
Four Year College Graduate	29	31%	29	28
Graduate Work/Degree	66	69	67	63
	100%	100%	100%	100%
Base (N) =	(135)	(29)	(51)	(57)

B. IMPORTANCE OF JOB FEATURES IN ASSESSING EMPLOYMENT OPPORTUNITIES

In order to identify job features which might either increase or decrease their interest in a professional opportunity, computer professionals were asked a series of three questions about the importance of particular job features in an employment decision. First, computer professionals rated twenty-three job features in terms of how important they are when looking for a job. A one-to-ten rating scale was utilized, where "10" meant that the feature was 'absolutely essential' while a "1" signified that it was 'of no importance whatsoever'. (See Table 3).

Second, respondents were asked to identify which three of the 23 items they rated initially represented their first, second and third "most important" criteria in evaluating job opportunities. (See Table 4).

Finally, computer professionals rated fourteen possible reasons for rejecting a job opportunity in terms of how frequently they would reject a job for that reason. For this question a 10-point scale was again used, but in this case a "10" meant the individual would 'always' reject a job with that feature while "1" meant he/she would 'never' reject a job for that reason. (See Table 5).

Table 3

Features Most Often Looked For In A Job*

	High, Essential (8, 9, 10)	Moderate Importance (4 - 7)	Little/No Importance (1, 2, 3)
Challenging Work	85%	15%	0%
Company Integrity	80	19	1
Opportunities for Advancement	73	26	1
Competitive Salary	71	28	1
High-caliber Co-workers	62	38	0
Recognition by Superiors	62	37	1
Medical Benefits	62	34	4
State-of-the-art Technology	53	43	4
Product Integrity	53	46	1
Good office Atmosphere	52	46	2
Job Stability	50	45	5
City or Metropolitan Area in Which Job is Located	50	42	8
Comfortable Commute	44	48	8
Pension Plan	35	52	13
Company Reputation in the Field	35	54	11
Office Privacy	32	59	9
Dental Care Benefits	32	54	14
Flexible Work Schedule	32	60	8
Assistance with Continuing Education	18	55	27
Bonuses	16	57	27
Stock Options	15	51	34
Profit-sharing	14	52	34
Fringe Benefits Other Than Income or Health	14	68	18

Base (137)

*Question: The list above contains a number of features that people like yourself often look for in a job. Please rate each one in terms of how important it is to you when looking for a job or when considering a new job. Use a scale from 1 to 10 when rating each item, where "1" means this job feature is of no importance to you whatsoever, "5" means it is moderately important, and "10" means it is absolutely essential. Use any number from 1 to 10, corresponding to the degree to which the feature is important to you.

Table 4

Most Important Features in a Job*

	Total Mentions	Selecting as Most Important	Selecting as Second Most Important	Selecting as Third Most Important
Challenging Work	57%	36%	14%	7%
Competitive Salary	42	14	14	14
Opportunities for Advancement	34	9	12	13
Company Integrity	28	15	7	6
High-caliber Co-workers	27	5	15	7
City or Metropolitan Area in Which Job is Located	25	7	12	6
Recognition by Superiors	15	0	4	11
Medical Benefits	13	1	4	8
Job Stability	12	4	3	5
Good Office Atmosphere	11	4	2	5
Product Integrity	8	1	5	2
State-of-the-art Technology	7	2	0	5
Flexible Work Schedule	7	2	1	4
Comfortable Commute	4	1	1	2
Company Reputation in the Field	4	0	2	2
Office Privacy	2	0	2	0
Profit-sharing	1	0	0	1
Stock Options	1	0	0	1
Dental Care Benefits	1	0	0	1
Fringe Benefits Other Than Income or Health	1	0	0	1
Pension Plan	1	0	0	1
Bonuses	0	0	0	0
Assistance with Continuing Education	0	0	0	0

Base (137)

*Question: Please...select the three items that are most important to you and put a "1" next to the most important feature, a "2" next to the second most important feature, and a "3" next to the third most important feature. Only rank three features.

Table 5

Reasons For Rejecting Potential Employment*

	Would Always/ Likely to Reject the Job (8, 9, 10)	Might Not Reject the Job (4 - 7)	Would Never/ Unlikely to Reject the Job (1, 2, 3)
Company Provides an Inferior Product or Service	77%	21%	2%
Layoffs Too Likely	69	24	7
Management Not People-oriented	57	39	4
Company Undercapitalized/Poor R&D Funding	53	39	8
Routine Work Projects	51	42	7
City or Metropolitan Area in Which Job is Located	38	52	10
Somewhat Lower Than Competitive Salary Level	37	59	4
Insufficient Benefits	36	58	6
Uncomfortable Commute	36	55	9
Relocation Necessary	34	39	27
Interviewer Made Poor Impression	31	54	15
Not Using State-of-the-art Techniques/Technology	26	67	7
Company Too Small	11	46	43
Company Too Large	5	46	49

Base (137)

*Question: People reject potential opportunities for a number of reasons. Please rate each of the factors listed in terms of how likely you would be to reject potential employment because of that factor. Use the 10-point scale to rate each item -- the higher the number, the more likely you would be to reject the job.

1. General Observations

As a group, computer professionals want to work at a challenging job in a stimulating and rewarding environment, and they expect to be well compensated for their work. As Table 3 shows, the vast majority (85%) rate challenging work as an essential/very important feature of potential employment, followed closely by company integrity (80%), opportunities for advancement (73%) and competitive salary (71%). Recognition by superiors (62%), high caliber co-workers (62%), medical benefits (62%) and state-of-the-art technology (53%) were other job/compensation features rated highly by more than half of the respondents. Note that these findings closely correspond with features found important in the earlier qualitative research conducted by the Newspaper Advertising Bureau (Job Search and Recruitment Advertising Study, 1983).

High expectations of employers are also revealed through an examination of which features were not rated as essential, however. Note that many of the benefits, such as pension plan, dental and flexible working schedule (Table 3), were rated as "moderately" important by the majority of the respondents rather than "essential". Hardly anyone rated those features of little or no importance, however. Since the respondents to this survey were fairly experienced, it seems likely that computer professionals expect to be offered a generous benefits package, as has been their experience. They are then free to select among potential employers on the basis of "career enhancement/satisfaction" features which they perceive as beneficial to their career goals.

As evidence for that notion, note that computer professionals were more likely to reject a job opportunity on the basis of inferior product quality (77%), instability/layoffs (69%), poor management (57%), and so on, than on the basis of a "somewhat lower than competitive salary level" (37%) or "insufficient benefits" (36%). (See Table 5)

2. Detailed Examination of Features

In order to obtain a better feel for the types of features computer professionals look for, the correlation matrix was inspected. Several general concepts emerged:

- job satisfaction variables
- salary and benefits variables
- company/product variables
- "other" features

As would be expected, the variables within each grouping showed moderate to strong correlations while not correlating with variables in other groups, indicating that respondents did in fact think of these variables as groupings.

a. Job Satisfaction

Features that make a clear contribution to overall job satisfaction are extremely important to computer professionals when they look for a job. These include challenging work, opportunities for advancement, recognition from superiors, the presence of high-caliber co-workers and use of state-of-the-art technology. (Note that job satisfaction variables appear predominantly in the "top five" ranked features of both Tables 3 and 4.)

Of these features, challenging work stands out as the most important variable; more than eight in ten respondents (85%) called challenging work an essential feature. While a few computer professionals rated challenging work as moderately important (15%), no one said it was unimportant. In addition, challenging work was the most frequently mentioned of all job features as being first, second or third most important feature looked for. (See Table 4).

The desirability of challenging work is further indicated by the finding that half (51%) would always/very often reject a job with too many "routine" work projects. (See Table 5)

Job satisfaction is enhanced when real opportunities for advancement (rated essential/very important by 73%) and recognition from superiors (62%) are present in the workplace. Note that a third (34%) said opportunity for advancement was his/her first, second or third most

important job criterion. Similarly, the majority (57%) would always/very often reject an employer who does not seem to be "people-oriented" (See Table 5).

From a recruitment standpoint, it is essential that the company can demonstrate its commitment to recognizing excellence in its workers and promoting from within. As we saw earlier, many computer professionals do not make a job change lightly, and may stay with a chosen employer for a significant portion of his/her career provided, we must assume, with ample promotion and recognition potential.

The degree to which a job environment is sophisticated and stimulating also adds to job satisfaction. Computer professionals value the presence of high caliber co-workers (rated essential/very important by 62%), who might be expected to provide both competition and good ideas for development.

Similarly, half (53%) said that availability/use of state-of-the-art technology is an extremely important feature looked for in a job. While just a quarter (26%) said they would reject a job which did not feature state-of-the-art technology, fully half (53%) would reject a job when the company is not dedicated to development and innovation ("company undercapitalized/poor R&D funding"). These data suggest that computer professionals are looking for a company that appreciates and supports their contributions, not only through salary and advancement, but also through adequate program support.

b. Salary and Benefits

Competitive salary, considered essential/very important in a new job by seven in ten (71%), is clearly the most important remuneration feature an employer can offer computer professionals. While it ranked slightly lower overall than challenging work, company integrity and opportunity for advancement (See Table 3), it seems likely that the lack of a competitive salary would greatly diminish the attractiveness of those other features (and, in fact, 37% said they would always reject a job that offered "somewhat lower than competitive salary"). Salary, as opposed to some other, less tangible features, is a concrete indication of the worth of the individual and his/her job contribution to the employer. Thus, the fact that competitive salary was more frequently named as a first, second or third "most important" feature than any other except challenging work (by 42% of the survey respondents) is not surprising.

Like everyone else, computer professionals expect to receive medical benefits as part of their payment for doing the job. Good medical benefits can be harder to come by, which may explain why more than six in ten (62%) called medical benefits an essential/very important feature in a new job opportunity. Further, many would reject a job that offered "insufficient benefits" (36%). Still, few (13%) indicated that medical benefits would be one of their top three considerations in seeking a new job. (See Table 4)

The only other "benefits" (in addition to salary and medical) which appear to be highly important to a large number of the computer professionals surveyed are pension (essential to 35%) and dental care (essential to 32%). Bonuses, stock options, "fringe benefits" and profit sharing were all cited by less than 20% as essentials. However, in each case, the majority of respondents did consider these benefits moderately important, and we would certainly expect them to compare the "packages" offered by various employers in a job search situation. (As indicated earlier, experienced computer professionals expect a good package.)

Interestingly, job stability, considered essential by half (50%), was positively correlated with most of the benefits features as well as with challenging work and company integrity. This finding suggests that a good salary/benefits package is considered one sign that the company is financially secure and committed to its employees. That is, the company which is willing to extend itself for the betterment of its employees offers a more stable environment and is a better "risk" for job seekers than one which cuts corners in that area.

c. Product/Company Variables

Computer professionals value the quality of the company and its product(s) highly when looking for a job. Company integrity, which might be construed as a measure of the company's financial stability, ethical orientation and so on, was called essential by 80% of all survey respondents (second only to challenging work).

Product integrity, at first glance, appears to be less important to computer professionals, since only about half rated it an essential job feature (53%). However, product/service inferiority was the number one reason cited for rejecting a job opportunity. Nearly eight of ten computer professionals (77%) would always/very likely reject a job with a company that "provides an inferior product or service". Perhaps the difference can be explained in terms of what the computer professional can bring to the job...is the product/service salvagable through the computer professional's efforts, or is management supporting a lost cause? If the product/service can be improved/marketable (with management backing), the job could be extremely challenging and rewarding!

This notion is supported by the fact that current company reputation in the field was considered less important than company or product integrity as a criterion for selecting a job. Only a third (35%) rated company reputation as an essential feature (compared to 80% for company integrity and 53% for product integrity), and few (4%) cited it as a first, second or third most important feature to look for. Still, the majority (54%) indicated that company reputation was somewhat important.

d. Other Factors in the Decision Process

In evaluating different employment opportunities, there are a number of "intangible" features that come into play which may or may not be

clearly tied to the job or the company. Included in this grouping are good office atmosphere, flexible working schedules, office privacy and willingness to assist in continuing education. Also included are such factors as length/comfort of the commute to work and, obviously, the city where the job is located.

Good office atmosphere is clearly an important feature, considered essential/very important by half (52%) and of moderate importance to nearly as many (46%). (Only 2% said it was of little or no importance.)

There is some indication, from the ratings of other features, that an environment responsive to the needs of computer professionals will be considered desirable. Flexible scheduling, rated essential/very important by a third (32%), may also be a factor here, as is office privacy (essential/very important to 32%).

The company's interviewer, as the official representative and as the only source of clues regarding how the office "really functions" is of vital importance in communicating the personality of the firm. There was some tendency for individuals who rated good office atmosphere and privacy highly to reject jobs because the interviewer "made a poor impression", particularly among those who are not favorably inclined toward relocation.

C. HOW PROSPECTS/DEMOGRAPHIC GROUPS DIFFER IN JOB SELECTION CRITERIA

In this section differences between Hot, Lukewarm and Longshot prospects are considered in terms of what they are looking for in a job, why they might reject a potential opportunity, and how that could impact on recruitment strategy and tactics. In general, Hot Prospects do not differ markedly from others in their ratings of most features.

1. Relocation

The primary difference between Hot, Lukewarm and Longshot prospects is that Hot Prospects are more willing to relocate than other prospect groups, which is good news for recruiters. Only 17% of the Hot Prospects indicated they would always or usually reject a job opportunity requiring relocation, compared to 33% of the Lukewarm prospects and 44% of the Longshots (See Table 8). Not surprisingly, the data analysis also showed that those willing to relocate were much less likely than others to reject a job because of its location (26% compared to 63% would always/usually reject), or an uncomfortable commute (29% compared to 52%). (Recall also that those who are willing to relocate tended to be less concerned about the location of the job and commuting comfort.)

In interpreting these data it is important to note that the majority (66%) of all computer professionals surveyed would consider a job involving relocation. Still, as a group they aren't ready to go just

anywhere - half said the city or metropolitan area where the job was located is an essential factor to consider, and one quarter cited location as one of their top three criteria.

2. Features Looked For in a Job

Overall, there was some tendency among Hot Prospects to value medical benefits and good office atmosphere more than other prospect groups and to value typical job satisfaction features (such as challenging work and competitive salary) less. Ratings for the importance of job stability and company reputation in the field were also lower than those of Lukewarms or Longshots. These differences were not statistically significant, however. (See Table 6)

In terms of the top features looked for in a job (See Table 7), the only difference between Hot, Lukewarm and Longshot prospects which approached statistical significance was the importance of advancement potential, and here again relocation appears to be a factor. Forty-three percent of the Hot Prospects indicated that advancement potential was one of their top three criteria, compared to 37% of the Lukewarms and 23% of the Longshots. Among those willing to relocate (which is a group with a disproportionate number of Hot Prospects), 40% cited advancement potential as a top three criterion compared to only 18% of those less willing to relocate.

Hot Prospects, further. tended to select challenging work and high caliber co-workers as top criteria less frequently than other prospect groups, but again the differences were not statistically significant.

By contrast, Longshots selected competitive salary less frequently and company integrity more frequently as top three criteria than others. These data suggest a simple reason for their status as Longshots: they like their current companies and are not easily moved by offers of more money.

With respect to reasons for rejecting jobs, these differences among the prospect groups were observed: Hot Prospects were slightly more likely to reject a job because management is not people-oriented, but less likely to reject a job because the company is undercapitalized. As mentioned previously, they were also less likely to reject a job on the basis of relocation or the city where the job is located. (See Table 8)

Lukewarms, on the other hand, tended to be more likely to reject a job with too many routine work projects and less likely to be concerned with commuting comfort.

Finally, Longshots tended to be the most concerned with layoffs, the least favorable toward relocation and the least concerned about benefits offered by a company.

Table 6 - Features Most Often Looked For In A Job (Prospect Groups)*

	Total**	Hot Prospects	Lukewarm Prospects	Longshots	Would Consider Relocation	Would Not Consider Relocation
Challenging Work	86%	79%	84%	91%	87%	85%
Company Integrity	80	76	78	84	78	85
Opportunities for Advancement	73	76	78	68	75	70
Competitive Salary	71	62	76	71	72	70
Recognition by Superiors	63	59	70	59	62	65
High-caliber Co-Workers	63	52	68	64	64	61
Medical Benefits	62	69	66	54	62	61
Product Integrity	53	45	52	59	55	50
Good Office Atmosphere	53	62	56	45	51	57
State-of-the-art Technology	53	55	48	57	54	52
Job Stability	50	41	54	52	45	61
City or Metropolitan Area Where Job is Located	50	38	40	66	43	65
Comfortable Commute	44	41	36	54	35	63
Company Reputation in the Field	36	28	32	43	40	26
Pension Plan	36	35	36	36	33	41
Flexible Work Schedule	33	24	30	39	32	35
Dental Care Benefits	33	21	36	36	33	33
Office Privacy	33	28	32	36	29	39
Assistance With Continuing Education	19	14	24	16	20	15
Bonuses	16	14	20	14	15	20
Stock Options	16	3	28	11	16	15
Fringe Benefits Other Than Income or Health	14	10	20	11	16	11
Profit Sharing	14	10	20	11	16	11
***Base	(135)	(29)	(50)	(56)	(89)	(46)

*Question: The list contains a number of features that people like yourself often look for in a job. Please rate each one in terms of how <u>important</u> it is to you when looking for a job or when considering a new job. Use a scale from 1 to 10 when rating each item, where "1" means this job feature is of no importance to you whatsoever, "5" means it is moderately important, and "10" means it is absolutely essential. Use any number from 1 to 10, corresponding to the degree to which the feature is important to you.

**Total = % rating feature as 8, 9 or 10.

***Excludes missing values.

Table 7 - Most Important Features in a Job (Prospect Groups)*

	Total**	Hot Prospects	Lukewarm Prospects	Longshots	Would Consider Relocation	Would Not Consider Relocation
Challenging Work	58%	46%	63%	59%	59%	56%
Competitive Salary	42	46	49	34	41	44
Opportunities for Advancement	33	43	37	23	40	18
Company Integrity	29	25	22	38	29	29
High-caliber Co-workers	27	18	28	32	29	24
City or Metropolitan Area in Which Job is Located	24	25	18	30	19	36
Recognition by Superiors	15	14	20	11	16	13
Medical Benefits	13	21	10	11	14	9
Job Stability	13	21	2	18	12	13
Good Office Atmosphere	11	21	8	9	10	13
Product Integrity	8	4	10	9	9	7
State-of-the-art Technology	7	0	9	7	7	7
Flexible Work Schedule	6	7	8	4	2	13
Comfortable Commute	4	0	2	7	2	7
Company Reputation in the Field	4	4	6	2	4	2
Office Privacy	2	0	4	0	0	4
Profit-sharing	2	0	2	2	2	0
Fringe Benefits Other Than Income or Health	2	0	0	4	2	0
Pension Plan	2	4	2	0	2	0
Stock Options	1	0	0	2	0	2
Dental Care Benefits	1	0	2	0	0	2
Bonuses	0	0	0	0	0	0
Assistance with Continuing Education	0	0	0	0	0	0
***Base	(135)	(28)	(51)	(56)	(90)	(45)

* Question: Please...select the three items that are most important to you and put a "1" next to the most important feature, a "2" next to the second most important feature, and a "3" next to the third most important feature. Only rank three features.

** Total mentioning as "most important."

***Excludes missing values.

Table 8 - Reasons For Rejecting Potential Employment (Prospect Groups)*

	Total**	Hot Prospects	Lukewarm Prospects	Longshots	Would Consider Relocation	Would Not Consider Relocation
Company Provides an Inferior Product or Service	78%	79%	76%	79%	82%	70%
Layoffs Too Likely	70	62	65	77	70	70
Management Not People-oriented	58	66	61	51	61	52
Company Undercapitalized/Poor R&D Funding	54	35	67	53	54	54
Routine Work Projects	51	41	63	47	57	41
City or Metropolitan Area in Which Job is Located	39	28	41	42	26	63
Somewhat Lower Than Competitive Salary Level	38	38	43	33	40	33
Insufficient Benefits	36	45	41	28	36	37
Uncomfortable Commute	37	41	27	44	29	52
Relocation Necessary	34	17	33	44	0	100
Interviewer Made Poor Impression	32	31	31	33	26	44
Not Using State-of-the-art Techniques/Technology	26	21	29	26	24	30
Company Too Small	11	17	12	7	11	11
Company Too Large	5	3	6	5	5	7
***Base	(135)	(29)	(49)	(57)	(89)	(46)

* Question: People reject potential opportunities for a number of reasons. Please rate each of the factors listed in terms of how likely you would be to reject potential employment because of that factor. Use the 10-point scale below to rate each item--the higher the number, the more likely you would be to reject the job.

** Total = % responding 8, 9, or 10.

***Excludes missing values.

3. Demographic Differences

Very few differences in the importance of job features were observed across demographic segments (tables not shown).

Those features where some differences were observed are exclusively benefits rather than work satisfaction or company variables, and none of them is substantial. As might be expected, those who rated medical benefits very important were more likely to be between the ages of 35 and 45 (prime child-rearing ages) than any of the other age groups. Continuing education was more important for younger professionals (25-34) than others. Office privacy, stock options, and profit sharing importance were all slightly higher among those with graduate work/degrees.

4. Summary and Implications

The data analysis revealed few statistically significant differences between Hot, Lukewarm and Longshot prospects concerning the importance of specific job features in assessing a professional opportunity. However, trends in the data suggest that the individuals in each prospect group do have slightly different priorities which could be addressed in recruitment efforts.

Hot Prospects are eager to change jobs now. They tend to be the most concerned with opportunities for advancement, medical benefits and good

office atmosphere and the least concerned with challenging work, high caliber co-workers and job stability. They also tended to rate current salary, company integrity, product integrity and job location as less important than others.

Compared to Lukewarms and Longshots, Hot Prospects appear more likely to reject a job where management is not people-oriented, but less likely to reject one on the basis of relocation/location issues or company stability (layoffs, undercapitalized).

While the Hot Prospects appear eager to change jobs, there may be a negative side to hiring some of those persons. One senses that among the Hot Prospects some are so eager to obtain a new job that their standards are somewhat lower than those of the other prospect groups. There can be several legitimate reasons for this eagerness (problems with management, rumors that layoffs in the division are imminent, etc.), but it may also be that among this group some are inherently less satisfied with job situations in general. Certainly their current satisfaction is much lower (though there is no difference for the Hot Prospects as a whole in the number of job changes they have made compared to Lukewarms and Longshots). For these perenially dissatisfied, retention could become a problem.

Lukewarm Prospects, by contrast, appear to have the highest job satisfaction and benefits standards. They seem to be the most concerned with challenging work and recognition by superiors, and tend to rate

salary, high caliber co-workers, continuing education, stock options, fringe benefits and profit sharing higher than others as well.

They appear most likely to reject a job on the basis of somewhat lower than competitive salary, routine work projects and undercapitalization, and least likely to do so because of an uncomfortable commute.

Some of those among the Lukewarms may be the "movers and shakers" of the industry. They expect a great deal from both the position itself and the employer.

Longshots, finally, appear to be the group most concerned with stability, in maintaining the status quo. Perhaps as a result, many of the Longshots may be the most concerned with company integrity and job location. They rated product integrity, job stability, comfortable commutes and company reputation highly as well.

They appear the most likely to reject a relocation job and/or a job where layoffs are too likely (an unstable situation).

Compared to the other prospect groups, Longshots were the least concerned with opportunities for advancement, medical benefits and competitive salary.

It may be that the Longshot group is composed of two distinct types of computer professionals: one type would be those who are well advanced in their careers and comfortably settled in a job and city they like. They have good money and benefits and little interest in making a job change, it would have to be a "once in a lifetime" opportunity.

The other group type of Longshot could be those who are "company men/women", individuals who value their current location and comfort more than fast track possibilities.

D. RELOCATION

1. Willingness to Relocate

As was mentioned in the previous section, computer professionals, as a group, are not averse to relocating for the right opportunity. Respondents were asked how likely they would be to reject a job opportunity requiring relocation on a one-to-ten scale, where "10" meant they would always reject the job and "1" meant they would never reject it (all other things being equal). Fully two-thirds (66%) would consider a job involving relocation (27% would never reject a job for that reason).

In fact, relocation ranked tenth out of the fourteen reasons for job rejection rated by the respondents, and significantly fewer individuals would always reject a relocation job than would reject a job where the

company provides an inferior product/service (77%); layoffs are too likely (70%); management is not people-oriented (58%); the company is under-capitalized (54%); or where the job has too many routine work projects (51%).

2. Factors in Accepting a Relocation Job

In order to determine what factors would make a job involving relocation more (or less) attractive to computer professionals, we asked them to rate 25 factors in terms of their importance in accepting such a job. A ten point scale was used, where "10" meant the factor was 'essential' to acceptance and "1" meant it was 'not at all' an important consideration. We compared the responses of Hot, Lukewarm and Longshot prospects and those of people willing and not willing to relocate (See Tables 9 and 10).

Looking at the results as a whole, the most important factors in deciding to take a relocation job were: relocation assistance (essential to 71%), their spouse's attitude toward the move (essential to 66%), a substantial salary increase (62%), same or better quality of housing (62%) and good schools for children (essential to 53%).

By contrast, far fewer computer professionals indicated that the following factors would be extremely important in that decision: same/lower cost of living (24%), same/lower mortgage rates (23%),

same/lower cost of housing (22%), help in finding a new house/apartment (21%), age of children (21%), proximity of stores/shopping (18%), availability of courses at educational institutions (17%), help in financing the purchase of a new house (17%) or help in finding suitable spouse employment (16%).

In order to see how these factors grouped together, the correlation matrix was examined. Six basic groupings emerged:

- Minimization of financial risk/loss
- Family considerations
- Career enhancement
- Quality of life considerations
- Location variables
- Spouse employment

Each of these "factor groups" will be discussed separately.

Table 9 - Features Important to Accepting A Job Offer Involving Relocation*

	Essential/Very Important to to Accepting a Job Requiring Relocation (8, 9, 10)	Moderate Importance (4 - 7)	Not Important to Accepting a Job Requiring Relocation (1, 2, 3)	Not Applicable
Relocation assistance, such as paying moving expenses	71%	24%	5%	0%
Spouses's attitude toward relocation	66	12	8	14
Substantial salary increase	62	34	4	0
Same or better quality of housing	62	36	2	0
Good school for children	53	12	14	21
Good, safe neighborhood to work in	49	44	7	0
Immediate advancement in position/rank/title	43	47	10	0
Clean air	40	53	7	0
Difficulty of selling the present house or apartment	36	48	16	0
Climate	34	59	7	0
Proximity of city/cultural life	34	56	10	0
Availability of recreational facilities	34	56	10	0
Children's attitude toward relocation	34	23	20	23
Ease of getting away to mountains, lakes, etc.	32	57	11	0
Many potential employers/availability of alternate employment in the area	29	51	20	0
Job availability for your spouse	29	28	29	14
Same or lower cost of living in new location	24	63	13	0
Same or lower mortgage rates in new location	23	59	18	0
Comparable or lower cost of new house or apartment	22	63	15	0
Help in finding a new house or apartment	21	54	25	0
Age of your children	21	31	25	23
Proximity of stores/shopping centers	18	61	21	0
Availability of courses at educational institutions	17	60	23	0
Help in financing the purchase of a new house	17	56	27	0
Help in finding suitable employment for spouse	16	32	38	14

(Base = 137)

*Question: Suppose you were considering a job involving relocation. Please rate all the features listed on how important they would be in deciding to accept a job offer involving relocation. Use a 10-point scale when rating each item, where "1" means of no importance whatsoever to accepting such a job. Use any number from 1 to 10 that corresponds to the importance of the item.

Table 10 -- Features Important to Accepting A Job Offer Involving Relocation (Prospect Groups)*

	Total**	Hot/Lukewarm Prospects Who Would Consider Relocation	Hot/Lukewarm Prospects Who Would Not Consider Relocation	Longshots Who Would Consider Relocation	Longshots Who Would Not Consider Relocation
Relocation assistance, such as paying moving expenses	70%	72%	67%	62%	79%
Spouses's attitude toward relocation	67	57	71	72	79
Substantial salary increase	62	55	86	53	67
Same or better quality of housing	62	50	81	62	75
Good school for children	53	47	48	53	75
Good, safe neighborhood to work in	49	43	43	47	71
Immediate advancement in position/rank/title	44	43	57	37	42
Clean air	41	40	33	37	54
Difficulty of selling the present house or apartment	36	26	33	37	37
Climate	35	28	52	25	50
Proximity of city/cultural life	34	28	43	44	29
Availability of recreational facilities	34	33	38	22	50
Children's attitude toward relocation	34	26	33	37	50
Ease of getting away to mountains, lakes, etc.	32	29	33	22	50
Many potential employers/ availability of alternate employment in the area	29	21	52	31	25

Table 10 (Continued) - Features Important to Accepting A Job Offer Involving Relocation (Prospect Groups)*

	Total**	Hot/Lukewarm Prospects Who Would Consider Relocation	Hot/Lukewarm Prospects Who Would Not Consider Relocation	Longshots Who Would Consider Relocation	Longshots Who Would Not Consider Relocation
Job availability for your spouse	29%	24%	48%	25%	29%
Same or lower cost of living in new location	24	19	29	9	50
Same or lower mortgage rates in new location	23	19	24	12	46
Comparable or lower cost of new house or apartment	22	21	24	9	42
Help in finding a new house or apartment	21	19	33	9	29
Age of your children	21	17	19	19	33
Proximity of stores/ shopping centers	18	17	18	9	29
Availability of courses at educational institutions	17	19	29	6	17
Help in financing the purchase of a new house	17	16	19	19	17
Help in finding suitable employment for spouse	16	5	33	22	17
Base	N = (135)	(58)	(21)	(32)	(24)

* Question: Suppose you were considering a job involving relocation. Please rate all the features listed on how important they would be in deciding to accept a job offer involving relocation. Use a 10-point scale when rating each item, where "1" means of no importance whatsoever to accepting such a job. Use any number from 1 to 10 that corresponds to the importance of the item.

**Percentage saying essential (8, 9 or 10).

a. Minimization of Financial Risk/Loss

This "factor group" includes relocation assistance (such as paying moving expenses), same/better quality of housing, problems selling the current house, having many potential employers in the area, same/lower cost of living, same/lower mortgage rates, comparable/lower cost of housing, home find assistance and home financing assistance. The basic concern suggested by the individual components is that of loss of purchasing power/financial security resulting from expenses that will be incurred in relocating to a new city or town. By and large, these issues are not encountered in a same-location job change (where one can generally assume living costs are relatively "fixed"). In that case, if a problem should occur, networks/resources are already in place to ease the process.

Of these financial risk/loss variables, relocation assistance and same/better quality of housing (essential to 71% and 62% respectively) were most frequently cited as important to the decision to take a job involving relocation. This is not really surprising because both reflect issues that help the individual directly compare his/her current situation to the prospective job. ("Will I have to spend my money just to get there--putting me in a bigger risk if it doesn't work? Once I'm there, will I find I can live better...or will I be worse off?").

Fewer cited difficulty of selling their current home (essential to 36%) or availability of alternative employment in the area (essential to 29%) as highly important factors. This is not surprising either, though, since the concerns expressed here are largely "second stage" concerns, or things to be worried about after the computer professional decides he/she is interested in the job and is starting the comparative analysis in earnest. Qualitatively, these variables express the risk of being "stuck" with the house in one's old location (and therefore unable to purchase appropriate housing in the new location), especially if the housing market is slow and the employer does not offer third party home selling assistance. They also reflect the fear of becoming threatened financially in the new location if the job does not work out for some reason (layoffs, disagreements, etc.).

Finally, the "third tier" variables reflect rather practical issues that will affect the speed and ease with which the computer pro could settle into his/her new location and become effective on the job (same/lower cost of living, same/lower mortgage rates, same lower cost of housing, home find assistance, home financing assistance). These are not generally "top of mind" factors early in the decision process, so it is not surprising that only one quarter or fewer of the respondents named them as essential determinants. It may be that those who mentioned them have been through the relocation process before (or have talked to someone else who's done it), so that their awareness is higher. Conversely, many relocating individuals choose not to purchase a home immediately (they

want to get to know the area first), so their need for these services may be lower.

Regardless of the job candidate's current level of awareness of relocation problems, an employer can rest assured that these issues will emerge, and the company should take steps from the very beginning of the application process to address them. By providing economic information about the community, particularly with respect to housing/cost of living expenses (including property taxes and so on), and by taking taking time to acquaint the individual with the community (by showing neighborhoods, points of interest, etc.) and its major employers, the recruiting company can significantly lower the perceived risks of moving. Real estate firms offering relocation network services can be of great assistance to the company in this area, especially if the employer is not of sufficient size/means to prcvide these benefits directly.

b. Family Considerations and Relocation

Family considerations include the spouse's attitude toward relocation, the availability of good schools for children, children's attitudes toward relocation and the age of the children. Obviously, these concerns affect married more than single candidates, but since the number of single-parent families has increased, employers would do well to ascertain the candidate's situation early on.

Of all family considerations cited, spouse attitude toward relocation, considered essential/very imporant by two thirds (66%), is clearly the most important.

In order to distinguish between the theoretical importance of spouse attitude ("If I was married at the time") and the concerns of those who are currently married, we asked (in a separate question): "How much influence would your spouse have in your decision to accept a job involving relocation? Would you say the feelings of your spouse would be one of the most important factors, would have some influence, or would have almost no influence at all?" Responses to that question clearly underscored the importance of the spouse, as 83% of all married respondents said it would be one of the most important factors. Only 13% said the spouse's attitude would be of "some influence", and very few (4%) indicated the spouse's attitude would be irrelevent.

The implications of these findings are clear. When considering a candidate who will have to relocate, it is essential that the employer woo both spouses, and the earlier in the interviewing process the better. If possible, the spouse should be invited to visit during the first or second interview trip (depending on the number of trips usually involved in the hiring procedures) and his/her concerns should be actively addressed. A spouse who feels left out, (especially when he/she is being asked to give up family/friends, a comfortable "known" environment, and perhaps a valued job) can and will work against a relocation decision.

Other than the spouse's attitude, the most important family consideration is good schools for children, considered essential/very important by half (53%) of the computer professionals. (Note that 50% of the respondents have one or more children under 18 living at home.) As firms who specialize in relocation will affirm, school information is the number one request made by families considering a move. Even if the public schools in one's community are excellent, it is a good idea to have full information on all available schools ready and waiting.

Finally, some (34%) indicated that children's attitudes toward relocation and the age of the children (21%) could be crucial in a decision to move. It may be that this concern is primarily one of families with older children (high school age), since a move during that time period is thought to have a negative impact on social development. Thus, it will be important to ascertain the ages of the children involved and, to the extent possible, address their concerns about the move.

c. Career Development and Relocation

Career development considerations include a substantial salary increase (essential/very important to more than six in ten computer professionals) and immediate advancement in position/rank/title (essential/very important to 43%). Of the two, clearly, salary is more important (a concrete reward for moving). However, it is important to note that career considerations do not have as high a priority in a

relocation context as they do when considering "any" job change. The financial risks and family considerations not encountered in the latter, perhaps more common situation, are just as important as career enhancement when relocation is involved. In a relocation recruitment situation, clearly it will be important that all three types of issues (risk reduction, family satisfaction, and career enhancement) be addressed for an acceptance of the job.

d. Good/Improved Quality of Life

Quality of life concerns include a good, safe neighborhood to work in, clean air, availability of recreation facilities, ease of getting away to mountains, lakes (etc.), and availability of courses at educational institutions. Of these, a good neighborhood to work in appears to be the most important (considered essential/very important by 49%). This makes good sense, as no one wants to work in a bad location, and if the individual has to relocate in the process, the situation would seem to be less than attractive. Similarly, interest in locations with clean air (noted as essential/very important by 40%) suggests that suburban or more rural locations will be preferred to those in the hearts of major metropolitan areas.

The "amenities" of the town/city where a job is located appear to be less important to a relocation decision. Still, one-third rated availability of recreational facilities (34%) and ease of getting away to

"nature" (32%) as critical to their decision. Again, interest in these items suggests the desirability of non-urban settings.

Fewer indicated that courses at area colleges/schools (17%) would be a top priority in a relocation decision.

Compared to financial risk, family and career considerations, the quality of life variables are less important to most computer professionals. Thus, recruitment advertising or efforts which emphasize the positive aspects of life in the company's town rather than answering the candidate's more pressing concerns are likely to be ineffective.

e. Location Variables

Location variables include climate and proximity of city/cultural life (both vital considerations to 34% of the respondents). These variables did not correlate with any of the other variables rated (including the quality of life variables discussed above), which was surprising. Perhaps the explanation for this is that they are "givens" of the company's location and not controllable. Considering the high number who said the city or metropolitan area where a job is located would be an important factor in choosing a job, it may be that "climate" is simply considered a rather fickle reason for rejecting a job.

f. Spouse Employment

Of all the factors considered in the study, those dealing with spouse employment issues seemed the least pressing. While nearly a third (29%) said availability of employment for the spouse was important, few expressed concern with obtaining help finding suitable employment for the spouse (16%). One reason for these findings is certainly the high percentage of male respondents (85% of the sample) in conjunction with the fact that the majority of those who are married reported a spouse who either works part-time (20%) or not at all outside the home (38%). Of course, most probably feel that their spouse is capable of locating employment without assistance.

3. Conclusions About Relocation Job Criteria

To sum up this section, there were a number of concerns expressed by computer professionals with respect to jobs involving relocation. In contrast to consideration of "any" job change, financial risk and family considerations are often more important (i.e., "threshold concerns") than is immediate career enhancement to the job decision. Issues concerning the relative quality of life offered by the new location (excluding housing/cost of living variables), the location itself and spouse employment are less important overall, but are likely to emerge in a fair percentage of recruitment cases.

Alert recruiters will be prepared to "sell" the spouse as well as the job candidate on the area, and will address the concerns of the entire family about the move.

4. How Prospects Differ in Relocation Criteria

Overall, Hot Prospects do not differ markedly from others in terms of the criteria they consider important in a relocation decision. Only two of the variables showed significant differences: good schools for children and a safe neighborhood to work in. In both cases, similar to what we saw when we asked about features desired for "any job", Hot Prospects were less likely to rate these variables "essential" than were other prospects. In the case of good schools, only 38% of the Hot Prospects said they were "essential", compared to 52% of the Lukewarms and 63% of the Longshots. Similarly, only 31% of the Hot Prospects said a safe neighborhood was "essential", compared to half (50%) of the Lukewarms and 57% of the Longshots. (Table not shown)

However, when the prospect groups were subdivided by whether or not the respondents would consider relocating, several trends in the data did emerge (Table 10). For example, Hot and Lukewarm prospects who would consider relocation were the least likely to say that the spouse's attitude would be crucial in a relocation decision.

Hot and Lukewarm prospects who would not consider relocation, conversely, tended to rate the following items as more important to a relocation decision than others: salary increase, same/better quality of housing, availability of alternate employment and job availability for the spouse. These concerns suggest that the financial risks inherent in relocation are a major concern for the group as a whole.

Longshots who would not consider relocation showed similar concerns about a new location. They were more likely than others to say that environment (good neighborhood to work in, good schools for children) and housing issues (cost of living, mortgage rates, cost of housing) were crucial to a relocation decision.

5. Most Desirable/Least Desirable Destinations

If they are to move, California is unquestionably the most desirable destination, preferred by half (52%) of all computer professionals surveyed. Sun, sand and Silicon Valley probably account for this. Also preferred were: Colorado (by 29%), Oregon (26%), Massachusetts (23%) and Washington (21%), all known for their strong computer industries as well as their beauty and pleasant living. Others rated highly (by more than 11% of all respondents) were: Arizona, Hawaii, Virginia, Texas, New Hampshire, Florida, North Carolina, and Pennsylvania. See Table 11 for a complete listing.

More trouble would be found in attracting good recruits to such states as Alabama (34% would not go there), Alaska, Mississippi, North Dakota, New York, Louisiana, New Jersey, or South Dakota, to name a few. But the negative votes were cast more widely than the positive ones, suggesting that each computer professional only picked a few states and that less consensus exists on this score.

Table 11

Most and Least Preferred States for Relocation

State Most Preferred*	Total Respondents	State Least Preferred**	Total Respondents
California	52%	Alabama	34%
Colorado	29	Alaska	32
Oregon	26	Mississippi	29
Massachusetts	23	North Dakota	29
Washington	21	New York	26
Arizona	15	Louisiana	25
Hawaii	15	New Jersey	23
Virginia	15	South Dakota	23
Texas	15	Arkansas	22
New Hampshire	14	Florida	22
Florida	13	Kansas	21
North Carolina	13	Georgia	20
Pennsylvania	13	Iowa	20
New York	11	Nebraska	20
Maine	10	Idaho	18
Vermont	10	Tennessee	18
District of Columbia	10	Texas	18
Maryland	10	Oklahoma	17
Connecticut	8	Michigan	16
Minnesota	7	Montana	16
New Mexico	7	Illinois	15
Georgia	6	Kentucky	15
Idaho	6	Maine	15
Virgin Islands	5	Massachusetts	15
Alaska	4	Minnesota	15
Michigan	4	Missouri	15
New Jersey	4	South Carolina	15
Ohio	4	West Virginia	15
Rhode Island	4	Wyoming	15
South Carolina	4	Utah	14
Utah	4	District of Columbia	13
Wisconsin	4	North Carolina	13

Table 11 (Continued)

Most and Least Preferred States for Relocation

State Most Preferred*	Total Respondents	State Least Preferred**	Total Respondents
Kentucky	3%	Ohio	13%
Nevada	3	California	12
Illinois	2	Indiana	12
Missouri	2	Nevada	12
Montana	2	Rhode Island	12
West Virginia	2	Arizona	10
Indiana	2	Connecticut	10
Kansas	2	Hawaii	10
Wyoming	2	New Hampshire	10
Delaware	1	Virgin Islands	10
Nebraska	1	Wisconsin	10
Oklahoma	1	Vermont	9
Tennessee	1	Delaware	8
Alabama	0	New Mexico	8
Arkansas	0	Pennsylvania	8
Iowa	0	Maryland	7
Louisiana	0	Oregon	7
Mississippi	0	Washington	7
North Dakota	0	Virginia	6
South Dakota	0	Colorado	5

Base = 137

Question: * a) If you were to relocate, please specify which states you would most prefer to go to.

**b) If you were to relocate, please specify which states you would not go to.

E. LOOKING FOR A JOB

1. Sources of Information

We asked computer professionals two questions about where they get information about new jobs. In the first question, respondents rated thirteen sources of information as "very useful", "useful", "not very useful" or "not at all useful". (They could also indicate that they were not familiar with the source.) In the second question, computer professionals indicated which one information source they use or would use most often for job information.

As Table 12 shows, only five sources of job information were rated as "very useful" or "useful" by the majority of the respondents: word of mouth/personal contacts, newspaper employment advertising, ads in trade journals, employment/executive search firms, and employee referral programs. Of these, word of mouth/personal contacts is clearly the most important source (96% rated it as "very useful" or "useful"). Newspaper advertising (83%) was second, and the most highly rated of all media-based information sources.

Following those sources, two-thirds considered ads in trade journals (75%) and employment/executive search firms (74%) useful information sources, and 65% rated employee referral programs that way.

Fewer said open houses (38%), job fairs (34%), employment advertising through the mail (28%) or professional directories (23%) were "very useful" or "useful" information sources. The lowest perceived usefulness ratings went to computerized employment data banks (15%), radio commercials (10%), state employment services (8%), and TV commercials (7%).

Table 12

Usefulness of Employment Information Sources*

	Very Useful/ Useful	Not Very/ Not At All Useful	Not Familiar With Source
Word of Mouth/Personal Contacts	96%	4%	0%
Newspaper Employment Ads	83	17	0
Ads in Trade Publications or Journals	75	25	0
Employment/Executive Search/ Placement Agencies	74	23	3
Employee Referral Program	65	23	12
Open Houses	38	46	16
Job Fairs	34	48	18
Employment Advertising Through the Mail	28	58	14
Professional Directories	23	51	26
Computerized Employment Data Banks	15	52	33
Radio Commercials	10	84	6
State Employment Services	8	76	16
TV Commercials	7	82	11

Base = 137

*Question: Think of your own experience with the sources of employment information and of anything you might have heard from others. Please rate each item listed in terms of how useful it is or would be as a source of employment information.

At first glance it may seem surprising that so few sources of information were considered useful. However, when we consider the experience levels of the computer professionals who responded to the survey, these findings are less surprising. By and large, our respondents were experienced professionals who already have developed personal networks and probably have had some experience with recruiters. It is likely that those with less experience would be more apt to utilize less "personal" sources (such as job fairs, state employment services, etc.), more frequently than their established counterparts.

2. Most Important Source of Information

The greater overall importance of the "big five" information sources (word of mouth, journal ads, newspaper ads, employment agencies and referral programs) was reinforced when computer professionals were asked to select the one source which they use/would use most frequently. Word of mouth (most important to a third--34%) was still the most frequently mentioned of the sources, but was closely followed by newspaper employment ads (24%), ads in trade journals (20%) and employment/executive search firms (19%). In this case only one respondent noted employee referral programs as most important (1%), but none of the other sources of information was mentioned as being most important.
(See Table 13.)

Table 13

Single Source of Job Information Used Most Often

	Percent of Respondents
Word of Mouth/Personal Contacts/Personal Networks	34%
Newspaper Employment Ads	24
Ads in Journals	20
Employment Agencies/Registries	19
Employee Referral Programs	1
Other	2

Base = 137

Not Mentioned:

Radio Commercials
Professional Directories
TV Commercials
Computerized Employment Data Banks
State Employment Services
Job Fairs
Open Houses
Direct Mail

*Question: What one source of employment information do you/would you use most often when looking for a job, when thinking of changing jobs, or when just monitoring job opportunities?

Interestingly, Hot Prospects were the least likely of the three groups to report word of mouth as the most frequently used source of job information: only 24% of the Hot Prospects said that, compared to 31% of the Lukewarms and 44% of the Longshots. In addition, Hot Prospects were significantly more likely to report using newspaper classifieds than were Lukewarms (41% compared to 16%). (Table not shown) Recall here that 24% overall rated newspaper classifieds as their most important source. One explanation for this may be that personal networks provide ongoing "surveillance" while newspaper ads are associated with an active job search.

3. How Computer Professionals Use the Newspaper

Like most other people, a majority of computer professionals surveyed reported reading or looking at a daily newspaper every day. (See Table 14.) Over half said they read or look at a paper Mondays through Fridays, with reading levels slightly higher on Saturdays (57%) and almost universal (92%) on Sundays. It is interesting to note that, compared to the population as a whole, these computer professionals are somewhat less likely to read the newspaper Monday through Saturday (54% compared to 63% of all adults) but substantially more likely than the population to read on Sunday (92% compared to 64% of all adults).

This national comparison, based on Simmons 1986 Survey of Markets and Media data, is not direct, since the Simmons question asked about "read yesterday" while the current study asked respondents to report reading for

Table 14

Days of Week Newspaper Usually Read*

	Percent of Respondents
Monday	53%
Tuesday	53
Wednesday	52
Thursday	53
Friday	54
Saturday	57
Sunday	92
Don't Know/No Answer	2

Base = 137

*Question: On what days of the week do you usually read or look at a daily or weekend newspaper?

each day of the week separately. Still, the findings suggest that computer professionals, perhaps because of their work habits and/or personality types, differ somewhat from the general population in their newspaper reading habits.

No differences in reading frequency/days were observed based on prospect status. That is, Hot Prospects were as likely as others to be reading a paper "every day".

As would be expected, Hot Prospects do report consulting the classified section of the newspaper for job information more frequently than Lukewarms or Longshots (though one person--a Lukewarm--said he looked at the classifieds every day). As Table 15 shows, Hot Prospects are twice as likely as others to say they consult the classifieds at least once a week (45% compared to 20% of the Lukewarms and 23% of the Longshots).

With respect to the specific days of the week the classifieds are consulted, Hot Prospects are no different from other computer professionals. Sunday, of course, is far and away the most popular day for reading the classifieds (89% said they usually do so then). Less than one in ten consulted the daily newspaper's classified, presumably because of the rich offerings available in the Sunday paper. (Table not shown)

When they do check the classifieds for employment information, computer professionals look under a variety of headings. None was named by a majority of respondents, however, perhaps because of their different

Table 15

Frequency of Newspaper Employment Ad Reading
In Help Wanted Section*

	Total of Respondents	Hot Prospects	Lukewarms	Longshots
Every Day	1%	0%	2%	0%
Several Times a Week	7	17	4	4
Once a Week	19	28	16	20
Once Every Couple of Weeks	18	10	22	18
Once a Month	15	17	16	13
Once Every Couple of Months or Less Frequently	40	28	40	45
Base**	(135)	(29)	(51)	(56)

* Question: How often to you read or look at the employment ads in the help wanted section of the newspaper?

**Excludes missing answers.

specialties. Computer professionals most frequently look for jobs under the heading "Data processing/computer programming" (43%). Other headings consulted include: "Engineers" (24%), "Computers" (20%), "Professional" (17%), "Analyst/system analyst" (15%) and "Administrative/management" (10%). A few others were named, but none by more than 2%. Table 16 shows these data.

While the classified section is where computer professionals most frequently look for job information -- more than eight in ten said they usually (73%), or sometimes (12%), consult it -- other sections of the paper are scanned as well. (On average, each person reported consulting two different sections for information.) As Table 17 demonstrates, three-fourths usually or sometimes consult the business section (75%) and nearly half look in careers (48%) for job information. Further, one-fifth consult the science section (21%).

Finally, in addition to the advertising sections that computer professionals actively consult for job information, recruiters ought to be aware of their general readership interests. Editorial material might also spark their interest in a job, and ads could be effectively placed in these sections. Nearly nine in ten (89%) of the computer professionals report that they usually read or look at the general news section, for example. The majority said they usually read business (79%), and local news (68%). About half of the computer professionals surveyed usually read entertainment (51%), the editorials (50%), sports (46%) and the weekend section (45%). Table 18 gives a complete breakdown of readership rates.

Table 16

Newspaper Employment Listings Consulted in a Job Search*

	Total Respondents**
Data Processing/Computer Programming	43%
Engineers	24
Computers	20
Professional	17
Analyst/Systems Analyst	15
Administrative/Management	10
Don't Know	3
Career Opportunities	2
Sales	1
Nursing	1
Other	7
No Response	10

Base = 137

* Question: Under what headings within the employment section of a newspaper do you look for ads in your professional field? (Just list the headings that come to mind; don't go to the paper and look them up.)

**Total exceeds 100% due to multiple responses.

Table 17

Sections of the Newspaper Consulted for Employment Advertising

	Sections Consulted:*		
	Usually	Occasionally	Subtotal**
Classified	73%	12%	85%
Business	59	16	75
Careers	37	11	48
Science	10	11	21
Sports	1	7	8
Local News	1	5	6
General News	0	4	4
Entertainment	0	2	2
Home	0	1	1
Other	1	1	2
Don't Know/ No Answer	5	6	11
"No Others"	N/A	47	N/A
Base = 137 Respondents			
Average Number of Sections Consulted (Excluding "Other")	1.8	.7	2.5

* Question: Employment advertising is usually in the classified section or in the business section. However, sometimes employment ads are in other parts of the paper. Please circle the sections or types of pages you usually look at if and when you are looking for employment ads. Now, circle any other sections or types of pages you might occasionally look at for employment ads.

**Sum of both responses.

Table 18

Sections of Newspaper Usually Read*

	Percent of Respondents
General News	89%
Business	79
Local News	68
Entertainment	51
Editorial Page	50
Sports	46
Weekend Magazine	45
Classified	36
Travel	33
Careers	32
Life-style	27
Home	20
Food	13
Comics	11
Science	7
Fashion	6
Other	2

Base = 137

*Question: What sections of the newspaper do you usually read or look at?

4. What Makes Them Notice Particular Employment Ads?

a. Essential/Screening Information

Computer professionals want solid nuts and bolts information in an employment classified ad. We asked them to rate thirteen features in terms of how important these features would be in attracting their attention to a specific ad (as "very", "somewhat", "not very" or "not at all" important). Table 19 shows these data.

Two-thirds (67%) said that the job description was very important, followed by job title, required qualifications/experience and job location (rated very important by 55%, 54% and 52% respectively). Note that most of the remaining respondents rated these features as somewhat/not very important. We might expect that these "first tier" types of information allow computer professionals to narrow their search and focus on a few good opportunities.

Following these more essential features, many of the computer professionals indicated that equipment/hardware/software technology specs, (39%), salary (36%), the size of the ad (34%) and the company name or logo (34%) were very important in attracting their attention to an ad. These job features may be "second tier" considerations for several reasons. First, the computer professional needs to screen through a mass of ads to find those few for which he is most qualified and that seem to offer the

Table 19

Features Attracting Attention to Ad*

	Very Important (1)	Somewhat/ Not Very Important (2 & 3)	Not At All Important (4)
Job Description	67%	32%	1%
Job Title	55	44	1
Required Qualifications and Experience	54	44	2
Job Location	52	44	4
Equipment/Hardware/ Software Technology	39	54	7
Salary	36	60	4
Size of the Ad	34	61	5
Company Name and/or Logo	34	63	3
Headline of Ad	23	72	5
Statement of Company Philosophy ("where the company is going," technological vision of the future)	13	76	11
Ad's Position on the Page	7	65	28
Graphics/Photos/Drawings	4	80	16
Descriptives Such as "Stimulating," "dynamic," "future-oriented," "career opportunity"	3	69	28

Base = 137

*Question: How important are the features listed in attracting your attention to a newspaper employment ad? Please rate each one on whether it is very important, somewhat important, not very important, or not at all important.

greatest "job satisfaction" potential. Equipment and salary, by contrast, may be aspects of the job which have to be discussed in the interview. Ad size, similarly, while important in attracting attention, (particularly for two "comparable" jobs), will be insufficient grounds for attracting attention to a job listing if the title/description is inappropriate.

b. Ad Features

Fewer said that the headline of the ad would be very important in attracting attention to the ad (23%). And very few of the computer professionals indicated that a statement of the company's philosophy (13%), the ad's position on the page (7%), graphics/photos/ drawings (4%) or descriptive phrases, such as "stimulating environment" (3%) would attract their attention to an ad. Again, these findings suggest that flash without substance will not be attractive in an ad and/or that the job must appear appropriate before the ad will be seriously considered for a response.

Of course, advertising professionals know that many of these ad characteristics have more impact than most laymen admit. Clearly, a large, well constructed ad filled with solid job information will attract considerable attention.

c. Hot Prospects Want More Definite Information

Hot Prospects differed from other individuals in several ways. First, they were much more likely to say that the job title would be important in attracting them to the ad (72% compared to 47% of the Lukewarms and 54% of the Longshots). This may reflect the more focused search of the Hot Prospect compared to other computer professionals. (Table not shown.)

In that same vein, Hot Prospects tended to value job descriptions more and ad size less than others, though these differences were not statistically significant. Again, this could reflect the fact that they are actively selecting ads to respond to while Lukewarms and Longshots are looking through the ads on more of a survey basis...to keep current with employment opportunities.

Finally, job location was less important to Hot Prospects (48% compared to 68% of the Longshots) and those would consider relocation (46% compared to 72% of those who would not consider relocation). These findings reinforce the idea that for those who are interested in getting out of their current situations quickly, location is less important than is future job stability.

5. Will They Respond to Your Ad?

In order to determine how instructions for contacting the recruiter given in an employment ad may impact on the responses generated by the ad, we asked computer professionals to indicate how likely they would be to follow nine types of instructions. For each type of instruction respondents indicated whether they would be "very likely", "somewhat likely", "not too likely" or "not at all likely" to respond to the ad. We also asked them a series of questions regarding responses to "blind" ads; those ads in which the recruiting firm does not identify itself.

As Table 20 shows, no more than half of the computer professionals said they would be "very likely" to respond to any specific instructions. The relatively low interest overall probably reflects the fact that the type of instruction would not be the most important factor in response. That is, job description, title, location, salary and so on would be the features of an ad based on which the individual selected a subsample of all listed ads for possible response. Only then would the instructions given become a factor in their responses.

a. Best Bet: Direct Contact with Hiring Department

Looking at the data in Table 20, it is clear that computer professionals would be most likely to answer an ad which asked them to send in a resume (54% "very likely" to respond"), contact the department

head (51%), contact the person in charge of hiring (49%) or call in (46%). These types of instructions, provided that a specific company and job are named, suggest that the ad was written to fill a specific position for which a search is now in progress. For that reason, a computer professional will most likely feel he/she would not be wasting time in answering the ad. Further, most of these instructions ask that the individual contact a real person involved in hiring, someone who, it must be assumed, the respondent would actually interview with or work for.

b. Less Effective: Personnel Department Contacts

In contrast, computer professionals are less likely to respond to ads asking that they contact a specific person in the personnel department (only about 30% would be very likely to do so). As our earlier qualitative research indicated, computer pros dislike having to be "approved of" by personnel, since these departments are not usually able to tell them much about the job in advance and may impose "stricter" criteria in selecting candidates to inteview with the department. Further, computer professionals may feel that dealing with personnel is akin to wading through bureaucratic red tape. It's too much trouble to bother with.

Table 20

Response to Employment Ads*

	Very Likely (1)	Not Too Likely (2 - 3)	Not At All Likely (4)
Send in a resume	54%	44%	2%
Contact department head	51	48	1
Contact the person in charge of hiring	49	47	4
Make a telephone call	46	53	1
Contact a specific person in the personnel department	30	65	5
Attend an open house	16	72	12
Contact personnel department	16	77	7
Call a job hotline	14	67	19
Mail in an application coupon included in the ad	11	62	27

Base = 137

*Question: As you know, employment ads contain different instructions as to how to contact the employer. If you were looking for employment, with all-other things being equal, how likely would you be to respond to an ad asking you to do the following...?

c. Least Effective: Mass Recruitment/Impersonal Techniques

Computer professionals are even less likely to respond to ads for which they must attend an open house (16% very likely), contact personnel department--without a specific person to call/write--(16%), call a job hotline (14%), or mail in an application coupon included in the ad (11%). These instructions may suggest, first of all, that the advertiser is an employment agency or a company recruiting prospects without a "real" job ready and waiting. They are also much less personal, and survey respondents may be reacting to the notion that an ad with these types of instructions will not contain enough other information about the job to warrant the expenditure of time and effort.

d. Blind Ads: Avoid Whenever Possible

In a separate question we asked about blind ads. Lack of information, the feeling that time will be wasted, and perhaps the high perceived risk of inadvertently applying to one's own company may explain why virtually no one said he/she would be very likely to respond to a such an ad. (Table not shown.) Only two percent would be very likely to answer a blind ad, and a mere 8% more would be somewhat likely to do so. The vast majority (89%) would not be likely to answer this type of ad. (One person -- 1% -- did not respond to the question.)

Neither a guaranteed response nor the promise that a resume would not be sent to certain specified companies altered the likelihood of response to a blind ad. (These questions were asked only of those who said they would be "not too" or "not at all" likely to respond to a blind ad, all else being "equal".)

Clearly, the obvious dislike of blind ads poses problems for employers, since circumstances sometimes make it inadvisable for the firm to reveal itself. This will be more of a problem when the firm hopes to attract local talent, and will not be able to recruit "openly" in other locations. We might fear further that highly experienced "good recruits" would be the least likely of all groups to respond to such an ad, which would mean that the employer would be unlikely to attract qualified personnel using this method. In those cases, it may be that recruitment agencies should be used as intermediaries in newspaper advertising.

6. Summary

To summarize this section, a strong employment ad will provide detailed information about a real and specific job, the requirements of the position, the job location and the job's title. The ad should ask candidates to respond with a resume or phone call to an individual in the hiring department. It is unlikely that the size of the ad and other "creative" ad features will positively impact the attractiveness of the ad relative to competition unless this important information is present.

Ads should be placed under a variety of headings within the classified section, including the more general "Data processing/computer programming" category, "Engineers", "Computers" and "Professionals" types of headings, as well as more specific categories (e.g., "Science") if the job calls for that subspecialty.

Firms should consider placing their ads in the business and careers sections of the paper as well as in classified. Sunday placement is essential, and it would be advisable to run the ad(s) for several weeks in order to capture less frequent ad readers (e.g., Lukewarm prospects) who might turn out to be excellent candidates.

SUMMARY AND RECOMMENDATIONS

The successful recruitment and retention of experienced computer professionals poses a tremendous challenge to employers. As a group, they demonstrate a strong desire for challenging, satisfying jobs, and they appear to expect a great deal from the employer. Perhaps because of the positive experiences they have had so far in their careers, computer professionals have developed both healthy egos and high expectations of the industries in which they work.

As we have seen, a large percentage of the computer professionals surveyed report at least some interest in exploring new job opportunities, and a majority would consider relocating for the right position. Contrary to what we might expect, however, the individuals most likely to change jobs show little segmentation on the basis of demographic characteristics, years of experience in the field, or area of specialization. The only variable in the survey which clearly delineated between those more and less likely to change jobs was satisfaction with their current job.

Why are some less satisfied? Based on what computer professionals identified as key features when looking for a <u>new</u> job, we might expect individuals performing "routine" work tasks without much hope for advancement to be the least satisfied, particularly if their current salary is low. However, not everyone rated challenging work as the

most important factor in a job decision. Other factors which figured prominently in computer professionals' evaluations of job features included job stability, poor product quality, poor management, and lack of support for the computer function. It seems likely that any combination of these "unfavorable" conditions would produce dissatisfaction.

In part, these sources of dissatisfaction are probably the result of the fact that these computer professionals were "in the right place at the right time". They entered the field in an expansive time, and their expertise has been coveted by employers all along. (By contrast, people entering advertising and other "high pressure" glamour industries have traditionally expected huge workloads for low pay.)

Nevertheless, with large shortages of experienced computer pros now looming on the horizon, firms would do well to enhance their competitive position in the industry. In order to attract and retain good workers, companies employing computer professionals need to assess their current levels of recruiting success and take steps to overcome shortfalls.

Clearly, an evaluation of the steps that need to be taken should begin internally. Although some might seem obvious, it is worth asking these questions and taking the answers seriously: Is the company satisfied with the "fit" between its computer functions and the types of individuals it employs? Is the firm really competitive in terms of salary and benefits? How successful are current recruitment programs, and what is the annual

turnover rate? Are current employees satisfied? (This last point is critical and cannot be overlooked in the evaluation. Ask employees about this and listen to their responses.)

In addition, it will be helpful to view the recruitment function as part of an overall, ongoing public relations program for the company. Considering the importance of personal networks as sources of job information for computer pros (including university professors), word available via the grapevine of a firm's reputation as an employer strongly affects the response generated by its recruitment efforts.

With respect to recruitment advertising, the content of ads is critical. As discussed earlier, computer pros say they want hard, straight-forward information in an ad before they will consider responding to it. Minimum requirements include a solid job description, the job title, required qualifications/experience and the location of the job. Some indication of the salary range, career path/opportunities and equipment/ hardware/software technology is also strongly recommended. By contrast, "fluffy" content, such as descriptive words ("stimulating", "career opportunity") and statements of company philosophy ("where the company is going") are much less attractive to these serious individuals. (They may also feel they are qualified to judge, based on the "hard" information present, whether or not the job is going to be challenging.)

While fewer computer professionals indicated that ad style/features, such as headlines, ads size, ad position on the page and graphics/photos/drawings would be important in attracting their attention to the ad, these findings need to be taken with a grain of salt. (Many people don't like to admit they are influenced by ad style, anyway.) It may be that "flashy" ads are perceived as lacking in substance, or are being used in an attempt to cover up some negative aspects of the job, especially if hard information is lacking or buried in a flowery text. A large, well placed ad full of hard information, by contrast, would be very attention-getting.

With respect to the types of headlines that would be most effective, clearly a job title or some other indication of the experience level and specialty required would be recommended. These titles allow the individual to select the ad at a glance and also demonstrate that the company regards computer pros as professionals. Other "newsworthy" information could also be effective in that regard, if the firm is expanding a division, opening a new division, starting a major project, etc.

The tone of the ad should be serious, but should also convey management's respect and concern for the individual as well as the firm's commitment to excellence in product and employees. It is particularly important to stress commitment to employees in "relocation ads" and to address their financial concerns (e.g., "We provide complete relocation benefits"). In the case of relocation advertising, it is strongly recommended that the ad not focus on the joys of living in the lovely city

where the firm is located. (That will probably be perceived as "covering up" or as unprofessional in addition to not addressing the issues of the job itself.)

Without question, ads should be placed in the Sunday edition of the newspaper, and should be run for several weeks to increase "reach" among those computer professionals who do not read the classified section every week. (Even among Hot Prospects, a majority does not read the classifieds every week.)

If the firm is concerned about the "psychological depreciation" of its ad (the longer the job is on the market, the less desirable it looks), several tactics could be used effectively to overcome this problem. First, for a one-shot trial of the ad, consider placing it in the business section, since that is read more regularly than the classifieds. Second, the firm could include reasons for a longer running ad right in the ad itself, or cite a closing date for acceptance of resumes.

In order to generate response from the largest number of qualified candidates, ads should include instructions that are quick and easy to follow (send a resume, call), and, if possible, that put the respondent in direct contact with the hiring department. Whenever possible, avoid using blind ads, which not only limit the number of responses generated but fail to attract the best prospects as well.

APPENDIX

SELECTED TABLES

Table 21

Satisfaction With Current Employer*

	Total Respondents
10 - Extremely Satisfied	9%
9	18
8	34
7	16
6	8
5	4
4	7
3	4
2	0
1 - Extremely Dissatisfied	0
	100%

Mean = 7.5

Base = 137

*Question: How satisfied are you with your current employer on an overall basis? Use the 10-point scale, where the higher the number, the more satisfied you are with your employer.

Table 22

Marital Status of Respondents*

	Total Respondents
Married	71%
Single	23
Widowed	0
Divorced	6
Separated	0
	100%

Base = 137

*Question: Marital Status

Table 23

Occupation of Spouse*

	Total Respondents
Working full-time	42%
Working part-time	20
Not working outside the home	38
	100%

Base = 98

*Question: If married, your spouse is:

Table 24

Number of Children in Household Under the Age of 18*

	Total Respondents
None	38%
One	17
Two	26
Three	6
Four or more	1
No answer	12
	100%

Base = 137

*Question: Number of children in your household under the age of 18:

Table 25

Sex of Respondents*

	Total Respondents
Male	85%
Female	15
	100%

Base = 137

*Question: Age:

Table 26

Age of Respondents

	Total Respondents
24 or under	2%
25 - 34	33
35 - 45	52
46 - 50	7
51 or older	5
No answer	1
	100%

Base = 137

Table 27

Number of Persons in Household*

	Total Respondents
One	21%
Two	27
Three	18
Four	24
Five	9
Six or more	1
	100%

Base = 137

*Question: Number of people in household including yourself.

Table 28

Annual Salary*

U.S. Dollars	Total Respondents
Under 20,000	0%
20,000 - 24,999	1
25,000 - 29,999	5
30,000 - 34,999	9
35,000 - 39,999	12
40,000 - 44,999	12
45,000 - 49,999	18
50,000 - 54,999	7
55,000 - 59,999	9
60,000 - 64,999	9
54,000 - 69,999	2
70,000 - 74,999	2
75,000 - 79,999	1
80,000 or more	6
No answer	7
	100%

Base = 137

*Question: Your annual salary:

Table 29

Total Gross 1984 Household Income*

U.S. Dollars	Total Respondents
Under 20,000	0%
20,000 - 24,999	1
25,000 - 29,999	3
30,000 - 34,999	7
35,000 - 39,999	7
40,000 - 44,999	10
45,000 - 49,999	14
50,000 - 54,999	9
55,000 - 59,999	4
60,000 - 64,999	8
65,000 - 69,999	5
70,000 - 74,999	2
75,000 - 79,999	2
80,000 or more	17
No answer	0
	100%

Base = 137

*Question: Total gross 1984 household income before taxes.

Table 30

Number of Years Employed in the Computer Science/Computer Engineering Field

	Respondents
Two - 10	49%
11 - 15	31
16+	20
Total	100%

Base = 137

Table 31

Area of Specialization

	Respondents
Management	20%
Software Applications Specialist	17
Computer Engineer	16
Computer Programmer	14
Systems Analyst	12
Systems Consultant	11
Research	3
Other	27
Total	100%

Base = 137